

PSBB LEARNING LEADERSHP ACADEMY

CLASS VIII SUBJECT: SCIENCE

CLASSWORK ASSIGNMENT

MICROORGANISM: FRIEND OR FOES ?

1. What is fermentation? How is it useful to us?

Ans: Fermentation is the process of converting carbohydrate to alcohol and carbon dioxide using microorganisms like yeast or bacteria under anaerobic conditions.

Fermentation is used for producing wine, vinegar and bread.

2. Bacteria are considered as our friends and foes? Give reason.

Ans: Parasitic bacteria can cause disease in human beings, animals and plants like Tuberculosis, typhoid, cholera etc. Some bacteria help in decomposition, nitrogen fixation, digestion, and fermentation of substances. Thus, they are considered as useful bacteria.

3. How is digestion in fungi different from digestion in human beings?

Animals digest their food inside their body. Fungi digest it outside their body by releasing enzymes on the food. Once the food is digested, it is absorbed by the fungus.

4. What is pasteurization? How is it useful?

Pasteurization is a method to preserve milk. The milk is first heated to 75°C for 15 seconds. It is then cooled quickly. The heating kills bacteria. The milk is chilled to prevent further growth of bacteria that have remained. This method was invented by Louis Pasteur.

5. What are vaccines? How does a vaccine work?

Vaccines consist of dead and weakened microbes. When these are swallowed or injected into the body of a patient, the body produces antibodies to fight them. The antibodies remain in the body and protect it from any future attack of disease germs.

6. What are:-

a) Antibiotic

Antibiotics can kill disease causing microorganism without causing any injury to body tissue or disturbance of the body functions. Examples: penicillin.

b) Vector

Vectors are the carriers of disease infecting microorganisms.

Eg:- Anopheles mosquito carries malarial parasite (*Plasmodium*)

7. What are the various ways of food preservation?

Ans: Food can be preserved:- ● By

sun drying (dehydration)

- Can be preserved by pickling and making jams
- By adding chemical preservatives

- Can be refrigerated
- By Pasteurization

8. Give examples for the following:

1. Communicable disease – Chicken pox, Influenza
2. Fungal disease – Downy mildew, Rust
3. Protozoans – *Amoeba*, *Paramecium*

9. Draw a neat and labelled diagram of Amoeba

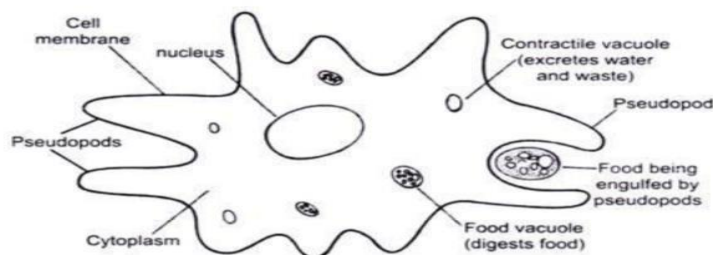
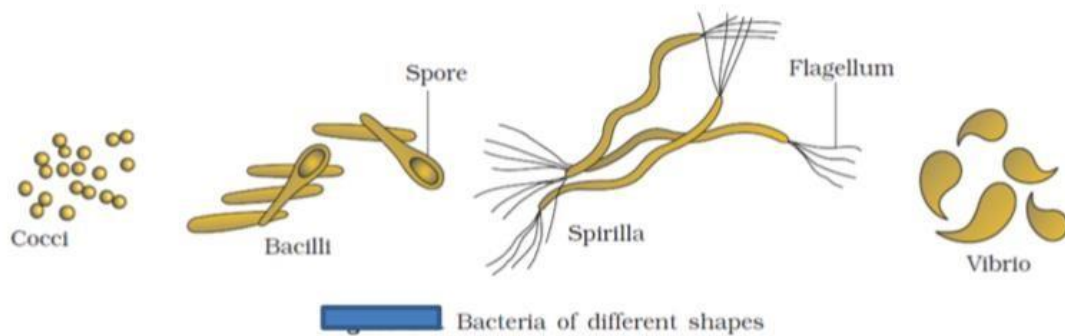


Fig. 9.7 *Amoeba proteus*

10. Draw neat, labelled diagrams to show the different shapes of bacteria.



11. Why are viruses considered to be on the borderline between living and non-living things?
HW

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